

IN THE CLAIMS

Please amend the following claims as indicated.

1. (Previously amended) At a docking bay for loading and unloading a heavy-duty vehicle, an apparatus for chocking at least one tire of said vehicle to prevent motion of the vehicle away from said docking bay during said loading and unloading, said apparatus including:

a) chock means for wedging between said tire and a surface on which the tire is resting, to block motion of said tire and a wheel on which the tire is mounted away from said docking bay;

b) sensor means mounted on said chock means for detecting a predetermined selected component of said vehicle, said sensor means selected from the group consisting of a motion detector, an inductive proximity sensor, a capacitive proximity sensor, and a photo-electric sensor;

c) a programmable microcontroller, said microcontroller being electrically connected to said sensor means; and

d) indicator means electrically connected to said microcontroller for indicating a condition selected from the group consisting of, a properly positioned chock means and an improperly positioned chock means, so that at least an individual performing said loading and unloading is alerted to said condition.

2. (Original) The apparatus of Claim 1, in which said sensor means is an inductive proximity sensor.

3. (Original) The apparatus of Claim 2, in which said inductive proximity sensor has a weld field immune range of about 50 millimeters; and in which said sensor-detects the steel belt of said tire being chocked.

4. (Original) The apparatus of Claim 1, in which said indicator means is at least one light visible to said individual performing said loading and unloading.

5. (Original) The apparatus of claim 1, in which said indicator means indicates said selected condition by an alert selected from the group consisting of, a visual alert, an audible alert, and opening or closing a door of said docking bay to allow or prevent, respectively, said loading or unloading to occur.

6. (Original) The apparatus of Claim 5, in which said indicator means alerts a driver of said vehicle of said selected condition.

7. (Previously amended) The apparatus of Claim 1, in which an electrical cable electrically connects said sensor means to said microcontroller; and in which a substantial portion of said electrical cable is intertwined with a tether chain attached at one of its ends to said chock means and at the other of its ends to said docking bay.

8. (Previously amended) The apparatus of Claim 1, in which a pair of chock means prevents forward motion of said vehicle; in which each one of a pair of said sensor means is mounted on respective ones of said pair of chock means; and in which each one of said sensors means is electrically connected to said microcontroller.

9. (Newly added) At a docking bay for loading and unloading a heavy-duty vehicle, an apparatus for chocking at least one tire of said vehicle to prevent motion of the vehicle away from said docking bay during said loading and unloading, said apparatus including:

a) chock means for wedging between said tire and a surface on which the tire is resting, to block motion of said tire and a wheel on which the tire is mounted away from said docking bay;

b) an inductive proximity sensor mounted on said chock means for detecting a steel belt of said tire being chocked, said inductive proximity sensor having a weld field immune range of about 50 millimeters;

c) a programmable microcontroller, said microcontroller being electrically connected to said inductive proximity sensor; and

d) indicator means electrically connected to said microcontroller for indicating a condition selected from the group consisting of, a properly positioned chock means and an improperly positioned chock means, so that at least an individual performing said loading and unloading is alerted to said condition.